been added by this amendment. After entry of this amendment, claims 21 and 23-47 are pending in this application. Consideration of these claims is requested.

Restriction Requirement

Applicants thank the Examiner for recombining Groups VI and VII in light of Applicant's argument, and acknowledges the finality of the Restriction Requirement with regard to Examiner's Groups I-V, VIII-XIX (claims 1-4 and 13-18). Applicants expressly reserve the right to pursue the subject matter of these claims in a separate application.

Specification Amendment

The Specification is amended herein to effect the change suggested by the Examiner. Specifically, the fifth full paragraph on page 9 is amended to replace "infectio-specific" with "infection-specific." Support for this amendment may be found at least at page 2, lines 17-37 and page 6, lines 7-11.

Claim rejections under 35 U.S.C. § 112

Claims 5-12 and 19-30 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed vaccines and compositions for inducing immune responses. Applicants traverse this rejection.

Claims 5-12, 19, 20 and 22

By this amendment, claims 5-12, 19, and 20, pertaining to vaccines and methods of making vaccines, are canceled. In addition, claim 22 is canceled. Hence, Applicants request that the rejection based on 35 U.S.C. § 112 of these claims be removed as rendered moot by cancellation of these claims.

Claims 21 and 23-30

The rejection of claims 21 and 23-30 should be withdrawn. Applicants submit herewith a Declaration of Dr. Daniel D. Rockey under 37 C.F.R. § 132. The Declaration and Exhibits A

and B, submitted in support of the Declaration, show that the teachings of the specification indicate that the inventors possessed the claimed subject matter at the time the application was filed. The Declaration explains that the description in the specification for making compositions for use in generating an immune response (*e.g.*, at page 19, line 29 through page 21, line 12) and the description of methods for administering these compounds (*e.g.*, at page 23, line 17 through page 24, line 25) provide guidance enabling one of ordinary skill in the art to prepare and administer compositions to induce an immune response using the IncA *Chlamydia* protein sequences disclosed in the application, such as SEQ ID NO: 8 or 14, and demonstrate clearly that the inventors possessed the claimed subject matter at the time the application was filed.

Exhibit B, submitted in support of the Declaration, is a publication describing experiments in which the inventors used compositions prepared as described in the application (*e.g.*, at page 19, line 29 through page 21, line 12) and methods disclosed in the specification (*e.g.*, at page 23, line 17 through page 24, line 25) to generate an immune response in rabbits. This publication was listed in the Information Disclosure Statement submitted by the Applicants on October 16, 2000, and is therefore of record in this application. The results of the experiments discussed in Exhibit B demonstrate that the claimed compositions and methods taught by the instant specification have been used to generate specific immune responses in subjects in response to administration of *C. trachomatis* IncA protein (SEQ ID NO: 14).

The Declaration of Dr. Rockey under 37 C.F.R § 132 and the accompanying data set forth in Exhibit B provide sufficient evidence that the inventors possessed the claimed subject matter at the time the application was filed, and that the claimed subject matter was sufficiently described in the specification, for instance at page 19, line 29 through page 21, line 12, and at page 23, line 17 through page 24, line 25. Hence, Applicants have complied with the requirements of 35 U.S.C. § 112, first paragraph, and request that the rejection of claims 5-12 and 19-30 be withdrawn.

Claim rejections under 35 U.S.C. § 102

Claims 21 and 27 are rejected under 35 U.S.C. § 102 as allegedly being anticipated by Zhu *et al.* (WO 95/11309, April 27 1995). Applicants respectfully disagree. However, to

advance prosecution of this case, claim 21 (and claim 27, which depends from claim 21) is amended herein to specify that the peptides used to generate an immune response comprise at least 10 contiguous amino acid residues of SEQ ID NO: 8 or 14. Support for this amendment can be found at least at page 3, lines 22-31 of the specification and in claim 22.

Applicants submit that the Zhu *et al.* publication does not teach the claimed compositions and/or methods because it does not teach use of a peptide comprising at least 10 contiguous amino acid residues of SEQ ID NO: 8 or 14. In fact, the sequences provided in the Zhu *et al.* publication share identity of no more than 5 amino acid residues with SEQ ID NO: 14 of the instant application. Thus, the Zhu *et al.* publication does not anticipate the claimed subject matter. Applicants therefore request that the rejection of claims 21 and 27 based on 35 U.S.C. § 102 be removed in light of this explanation and the amendments to the claims made herein.

New claims

By this amendment, new claims 31- 47 have been added to the application. Support for new claims 31-47 can be found in the original claims, and throughout the specification. Specifically, support for the newly added claims can be found in at least the following locations:

Claim	Original Claim	Support in Specification
31	11	Page 15, line 31- page 16, line 26
32		Page 16, lines 25-26
33		Page 16, lines 25-26
34	11	Page 15, line 31- page 16, line 26
35		Page 16, lines 25-26
36	5,6,8	Page 3, lines 22-31
37	11	Page 15, line 31- page 16, line 26
38		Page 16, lines 25-26
39	5, 6, 8	Page 3, lines 22-31
40	11	Page 15, line 31- page 16, line 26
41		Page 16, lines 25-26
42	5, 6, 8	Page 15, lines 27-30
43	11	Page 15, line 31- page 16, line 26
44		Page 16, lines 25-26
45	5, 6, 8	Page 15, lines 27-30
46	11	Page 15, line 31- page 16, line 26
47		Page 16, lines 25-26

No new matter has been added by these amendments, and no new search will be required to evaluate them. As discussed above, the Zhu *et al.* publication does not disclose sequences having homology of greater than 5 amino acid residues with SEQ ID NO: 8 or 14 of the application. Thus, new claims 31-47, directed to compositions and methods for inducing immune responses using peptides derived from SEQ ID NO: 8 or 14 of at least 10 contiguous amino acid residues, are believed to be equally free of the Zhu *et al.* publication.

CONCLUSIONS

The present claims are in condition for allowance. If it may expedite allowance of these claims, the Examiner is invited to call the undersigned patent attorney at the telephone number listed below.

Respectfully submitted,

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Marked-up Version of Amended Claims and Specification
Pursuant to 37 C.F.R. §§ 1.121(b)-(c)

In the Specification:

At page 9, fifth full paragraph:

"Vaccine" A vaccine is a composition containing at least one immunostimulatory peptide which may be inoculated into an animal with the intention of producing a protective immunological reaction against a certain antigen. The antigen to be protected against may be, for instance, an ~~infectio-specific~~ infection-specific antigen of *Chlamydia.*

In the Claims:

21. (amended) A composition for inducing an immune response in a subject, comprising at least one purified peptide comprising at least ~~5~~10 contiguous amino acids of an amino acid sequence as set forth as SEQ ID NO: 8 or SEQ ID NO: 14.

26. (amended) A method of making a composition for inducing an immune response in a mammal comprising combining a pharmaceutically acceptable excipient with at least one purified peptide having an amino acid sequence as set forth as SEQ ID NO: 8 or SEQ ID NO: 14.